PERMIT TO OPERATE EVALUATION

Applicant's Name	DELUXE PACKAGES, INC.
Company ID	007713
Mailing Address	P.O. BOX 2447, SANTA FE SPRINGS, CA 90670-0447
Equipment Address	11605 PIKE STREET, SANTA FE SPRINGS, CA 90670-2937

EQUIPMENT DESCRIPTION:

APPLICATION NO. 497126:

Title V "De Minimis Significant Permit Revision" Plan – 3rd Revision

APPLICATION NO. 450470: PO NO PC

NON-ABRASIVE BLASTING MACHINE CONSISTING OF:

1. BLASTING MACHINE, ANILOX CLEANING SYSTEM, MICRO CLEAN, MODEL NO. 72A
2. ONE NOZZLE WITH A MAXIMUM INTERNAL DIAMETER OF ¼ INCH.
3. PRESSURE POT
4. PLANT AIR

APPLICATION NO. 497125: PO NO PC

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. BAGHOUSE, FLEXO CONCEPTS, MICROCLEAN 72A, WITH INTEGRAL CYCLONE, 30 CLOTH FILTER BAGS, EACH 6" DIA. X 3' - 6" H., WITH A TOTAL FILTER AREA OF 165 SQ. FT.
2. EXHAUST SYSTEM VENTING A BLASTING MACHINE

BACKGROUND:

Deluxe Packages, Inc., ("applicant") has submitted two applications as Class III on 11/15/05 & 03/17/09 for the equipment described above. The abrasive blasting system & control equipment has been installed and is operating. It was later determined that the APC system is

a separate permit, therefore, A/N 497125 was submitted on 03/17/09. The cyclone and dust collector are connected to the blasting machine by a flexible duct.

This facility currently holds permits for two adhesive application systems and three flexographic printing presses. This facility manufactures food packaging bags and wrappers. The District issued their five-year Title V renewal permit on March 26, 2006. This is the 3rd revision since the Title V permit was renewed.

The facility currently operates under a facility-wide VOC emission cap of 943 pounds per day. This is a small machine that results in a negligible increase of PM_{10} only.

The applicant received four Notices of Violation from 2001-2006 for failure to submit annual and semi annual reports, comply with permit conditions and exceeding the NOx emissions for one oven that serves a flexographic press. All the issues have been resolved, compliance achieved and cases are closed.

PROCESS DESCRIPTION:

The applicant operates a typical flexographic printing operation at this location. This equipment is a non-abrasive blasting machine with cyclone and baghouse used to clean the dried ink from the Anilox rolls used on the flexographic printing presses (spot cleaning of Anilox rolls). The baghouse is cleaned manually by pulling a lever once a day. The company has to use non-abrasive plastic blasting media to prevent damage to the Anilox roll.

EMISSIONS:

Machine information:

Internal Volume	24 cubic feet (approximately)
Emission Factor	0.01 lb/lb, Permit Processing Handbook
Nozzle diameter size	1/4 inch
Operating air pressure	50 psig (in order not to damage the Anilox Roll from Brochure)
Max air pressure	50 psig
Number of filters	30
Cloth Area	6 inch dia,/12inch/ft x 3.14 x 3.5 ft. L x 30 filters = 165 sq.ft
Blower Rating	300-700 cfm
Density of abrasive	74.3 lb/cu. ft. (MSDS)
Density of sand	99 lb /cu. ft.

4 to 6 cycles/day
Each cycle consists of 10 minutes for set up time, 20 minutes for blasting time, 5 minutes for cleaning time.

At 50 psig and ¼" nozzle diameter, the flow rate of sand is 168 lbs/hr (from Table 2)

Adjust for Polymer – flowrate = 168 (74.3/99) = 126 lb/hr
(126 lbs/hr)(20 min/cycle)/(60 min/hr) = 42 lbs/cycle

Time of one cycle = 10 + 20 + 5 = 35 min
(42 lbs/cycle)(60 min/hr)/(total time of operation 35 min/cycle) = 72 lbs/hr
R1 emission rate = 72 lb/hr X 0.01 lb/lb emission factor = 0.72 lb/hr
Dust collector at 99% efficiency

R2 = 0.72 lbs/hr X 0.01 = 0.0072 lb/hr

Maximum Daily emissions = 0.0072 X 6 cycles = 0.043 lb/day

Average daily at 0.0072 X 4 cycle = 0.03 lb/day

30 day average = negligible

Even @ 24 hrs/day the PM10 emissions are still below 0.5 lb/day:

0.072 lb/hr x 24 hrs/day = 0.173 lb/day

Blast machine and baghouse design check:

Ventilation rate = @ average flow of 500 cfm ÷ 24 cu. ft. = 20.8 changes/min. This meets the recommended 20 air changes per minute.

Air to cloth filter ratio @ average flow of 500 cfm ÷ 165 sq. ft. = 3.0:1 which meets the recommended 3.0:1 ratio for non-reverse air cleaning baghouses.

Rule 1401 Emissions:

There are no toxic air emissions expected from this operation. Attached MSDS does not contain a solid that are listed as toxic compounds.

RULES:

Rule 212 A public notice will be required only if one or more of the following criteria is met:

a. the equipment is located within 1000 feet of a school,
OR
b. the increase of emissions exceed the limits in subdivision (g),
OR

c. the toxic emissions result in an MICR of more than one in a million on a worst-case basis.

None of these three criteria are met, so a public notice is not required.

Rule 401 Visible emissions are not expected with proper operation of this equipment. There are no complaints on file for the current operation. Visible emissions were not observed from operation of the equipment during my visit of the facility on 6/4/08. The system looked new, clean and was operating properly.

Rule 402 Operation of equipment is not expected to create a nuisance. There are no complaints on file for the facility. Odors were not detected from the operation of the equipment during my visit of the facility on 6/4/08. The system was clean and operating properly.

REG. XIII 1303(a): For PM_{10}, the BACT requirement for an abrasive blasting machine is a baghouse; this unit is equipped with a cyclone/baghouse so this equipment meets BACT.

1303(b)(1): Modeling is not required for PM_{10} since the quantity of emissions from the equipment is 0.007 which is well below 0.41 lb/hr in Table A-1.

1303(b)(2): No PM_{10} offsets are required, as this equipment emits less than 1 lb/day (0.5 lb/day) of PM_{10}.

Rule 1401 There are no toxic air contaminants present in the materials used in this equipment.

REG XXX:

The proposed project is considered as a “de minimis significant permit revision”. Rule 3000(b)(6) defines a “de minimis significant permit revision” as any Title V permit revision where the cumulative emission increases on non-RECLAIM pollutants or hazardous air pollutants (HAPs) from these revisions during the term of the permit are less than any of the emission threshold level indicated in the rule. This is the 3rd revision since the Title V renewal was issued on March 26, 2006. The proposed project consists of the installation of a blast machine vented to a cyclone/baghouse. The cumulative emission increases resulting from the proposed permit revision are summarized as follows:

Revision	HAP	VOC	NOx	PM_{10}	SOx	CO
1st Permit Revision: modified PC under A/N 436456 for flexographic printing press by the replacement of the burner under A/N 464862	0	0	0.5	0	0	0.4
2nd Permit Revision: Convert P/C to P/O for A/Ns 446205 (laminator) & 464862 (flexographic printing press). Remove replaced flexo press under A/N 238270, and remove modified flexo press with P/C under A/N 436456	0	0	0	0	0	0
3rd Permit Revision: Installation of blasting machine with cyclone/baghouse, A/N 450470 & 497125	0	0	0	0.04	0	0
Cumulative Total	**0**	**0**	**0.5**	**0.04**	**0**	**0.4**
Maximum Daily	**30**	**30**	**40**	**30**	**60**	**220**

RECOMMENDATION:

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a "de minimis significant permit revision", it is exempt from the public participation requirements under Rule 3006 (b). A proposed permit incorporating this permit revision will be submitted to EPA for a 45-day review pursuant to Rule 3003(j). If EPA does not raise any objections within the review period, a revised Title V permit will be issued to this facility.